

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Cancelled)
2. (Currently Amended) A method according to claim [[1]] 5, further comprising sensing cardiac activity with the IMD and wherein the timing information includes timing of sensed cardiac activity.
3. (Currently Amended) A method according to claim [[1]] 5, further comprising sensing physiologic conditions of the patient with the IMD.
4. (Currently Amended) A method according to claim [[1]] 5, further comprising applying cardiac pacing pulses using the IMD and wherein the timing information defines [[a]] timing of cardiac pacing stimulation pulses applied to the patient by the IMD.
5. (Currently amended) ~~A method according to claim 1,~~ A method of performing magnetic resonance imaging (MRI) on tissue of a patient having an implantable medical device (IMD) with a telemetry unit communicating timing information as to operational conditions of the IMD, comprising:
 - receiving the timing information communicated from the (IMD);
 - applying a plurality of discrete MRI electromagnetic radiation bursts to the tissue of the patient, wherein said applied radiation bursts are synchronized with operational conditions of the IMD based upon the received timing information;
 - imaging the tissue upon a display, whereby the imaged tissue is displayed in a substantially common state during each of said plurality of radiation bursts, further comprising:

stimulating a patient with the IMD based upon the timing information to produce a specified cardiac rhythm;

imaging the heart tissue based on timing information during application of the stimulation applied to the patient by the IMD; and

at least one of storing and displaying at least some of said plurality of images when the heart tissue is at common points during the produced cardiac rhythm.

6. (Previously presented) The method of claim 5, wherein stimulation based on the timing information is intended to induce an arrhythmia.

7. (Currently Amended) The method of claim [[1]] 5, wherein the IMD is a pacemaker and wherein the timing information defines a timing of a cardiac cycle.

8. (Currently Amended) The method of claim [[1]] 5, wherein performing the MRI includes applying one or more electromagnetic radiation bursts based on the timing information.

9. (Previously presented) The method of claim [[1]] 5, wherein performing the MRI includes applying one or more gradient magnetic fields based on the timing information.

10. (Previously presented) A method of performing magnetic resonance imaging (MRI) on a patient stimulated by an implantable medical device (IMD) having a telemetry unit communicating stimulation timing information, comprising:

stimulating a patient with the (IMD) based upon the stimulation timing information;

transmitting the stimulation timing information from the IMD;

receiving at an MRI device the stimulation timing information transmitted from the IMD; and

responsive to receipt of the timing information by the MRI device, applying a plurality of electromagnetic radiation bursts from the MRI device to the patient synchronized with the timing information, whereby tissue being imaged is placed in a substantially common state during each of said plurality of electromagnetic bursts.

11. (Previously presented) The method of claim 10, further comprising:
sensing conditions of the patient with the IMD;
communicating sensing timing information indicative of the sensed conditions to the MRI device; and
applying the MRI radiation bursts to the patient synchronized with the sensing timing information.

12. - 25. (Cancelled)

26. (Cancelled)

27. (Currently amended) An apparatus according to claim [[26]] 29, wherein the IMD comprises means for sensing cardiac activity wherein the timing information includes timing of sensed cardiac activity.

28. (Cancelled)

29. (Previously presented) ~~An apparatus according to claim 28, An~~
apparatus comprising:

means for receiving timing information from an cardiac-based implantable medical device (IMD) related to timed operating conditions of the IMD;

means for performing magnetic resonance imaging (MRI) of heart tissue by applying electromagnetic radiation based upon the received timing information; and

means for synchronizing application of electromagnetic radiation with the received timing information, whereby the heart tissue being imaged is placed in a substantially common state during each application of radiation, wherein the IMD comprises means for applying cardiac stimulation pulses and wherein the timing information defines timing of cardiac stimulation pulses applied to the patient by the IMD to produce a specified cardiac rhythm and wherein the MRI comprises:

means for imaging the cardiac tissue during application of the cardiac stimulation by the IMD based upon the timing information; and

means for storing and displaying a plurality of images taken during common points during the produced cardiac rhythm.

30. (Previously presented) The apparatus of claim 29, wherein cardiac stimulation based on the timing information is adapted to induce an arrhythmia.

31. (Currently amended) The apparatus of claim ~~[[26]]~~ 29, wherein the IMD comprises a pacemaker and wherein the timing information defines a timing of a cardiac cycle.

32. (Currently amended) The apparatus of claim ~~[[26]]~~ 29, wherein the MRI comprises means for applying one or more electromagnetic radiation bursts based on the timing information.

33. (Currently amended) The apparatus of claim ~~[[26]]~~ 29, wherein the MRI comprises means for applying one or more gradient magnetic fields based on the timing information.

34. (Previously presented) An apparatus for performing magnetic resonance imaging using an MRI device (MRI) on a patient having an implantable medical device (IMD), wherein the IMD comprises:

means for stimulating the patient based upon timing information; and

means for transmitting the timing information from the IMD; and wherein the MRI comprises:

means for receiving the timing information transmitted from the IMD; and

means responsive to receipt of the timing information, for applying electromagnetic radiation to the patient synchronized with the timing information, whereby tissue being imaged is placed in a substantially common state during each of the applications of electromagnetic radiation.

35. (Previously presented) The apparatus of claim 34, further comprising:

means for sensing conditions of the patient with the IMD;

means for communicating sensing timing information indicative of the sensed conditions to the MRI device; and wherein the MRI comprises:

means for applying the electromagnetic radiation synchronized with the timing information.